

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

J. Rine and M. Ashby Attorney Docket No.: UOCB118456

Application No.: 10/038,206 Group Art Unit: 1631

Filed:

January 2, 2002

Title: SYSTEMS FOR GENERATING AND ANALYZING

STIMULUS-RESPONSE OUTPUT SIGNAL MATRICES.

TECH CENTER 1600/2900

AMENDMEN

SECOND PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115

Seattle, Washington 98101

October 31, 2002

TO THE COMMISSIONER FOR PATENTS:

In the Claims:

Please amend Claims 59, 67 and 68. All pending claims thus presented for examination are as follows

- 38. A method for analyzing the effects of subjecting a living thing to a stimulus comprising:
- (a) detecting physical signals from a plurality of units ordered in a probe matrix by contacting the probe matrix with gene transcripts or cDNA derived from said living thing subjected to said stimulus, wherein each unit of the probe matrix confines a probe comprising a different pre-determined sequence of nucleotides, and wherein said sequence is hybridizable with an identified gene of said living thing, or with a transcript of the gene, or with cDNA derived from the gene,
 - (b) transducing the physical signals into electrical output signals,
 - storing in digital form each electrical output signal in an output signal data (c)

structure, wherein each stored digital signal is associated (i) with said stimulus and (ii) with the identity of said identified gene, and

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